

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:20

First Dose M/F: NA / NA

Lab: NCTR

C Number: MG96005
Lock Date: Not Entered.
Cage Range: All
Date Range: All
Reasons For Removal: All
Removal Date Range: All
Treatment Groups: All
Study Gender: Both
PWG Approval Date NONE

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CD Rat Male F3 0PPM	DAY ON TEST	Alimentary System																						
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	4	4	4	4	4	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7
		6	0	6	9	9	9	0	5	8	0	0	3	6	6	8	9	2	4	4	5	5	5	5
		0	2	8	4	7	7	6	0	1	6	9	5	2	5	3	5	9	2	4	1	1	1	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	1	1	1	1	1	1	2	2	2	2	3	3	4	4	6	9	9	9	9	9	9	0
		5	0	2	4	4	4	5	0	3	9	9	5	9	1	4	2	3	4	4	7	7	7	9
		5	4	6	4	6	7	1	6	9	5	6	1	8	3	3	2	8	7	8	0	1	2	3

Alimentary System

Esophagus	A	A	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																		X						
Intestine Large, Cecum	A	A	A	A	A	A	+	A	+	+	M	+	+	+	A	A	+	+	+	+	+	+	+	
Intestine Large, Colon	A	A	A	A	A	A	+	A	+	+	M	+	+	+	A	A	+	+	+	+	+	+	+	
Adenocarcinoma																								
Intestine Large, Rectum	A																							
Leiomyosarcoma																X								
Intestine Small, Duodenum	A	A	A	A	A	A	+	A	+	+	M	+	+	+	A	A	+	+	+	+	+	+	+	
Adenocarcinoma																								
Intestine Small, Ileum	A	A	A	A	A	A	+	A	+	A	M	+	+	+	A	A	+	+	+	+	+	+	+	
Intestine Small, Jejunum	A	A	A	A	A	A	+	A	+	M	+	+	+	A	A	+	+	+	+	+	+	+	+	
Liver	+	+	+	+	+	+	+	+	A	+	+	M	+	+	+	A	+	+	+	+	+	+	+	
Hepatocellular Adenoma																								
Hepatocellular Carcinoma																X								
Leukemia			X																					
Lymphoma Malignant		X		X																				
Pancreas	A	M	I	A	+	+	+	A	+	+	M	+	+	+	A	+	+	+	+	+	+	+	+	
Salivary Glands	A	+	+	A	+	+	+	+	+	+	M	+	+	+	A	+	+	+	+	+	+	+	+	
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																	X							
Lymphoma Malignant			X		X																			

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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	4	4	4	4	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7
		6	0	6	9	9	9	0	5	8	0	0	3	6	6	8	9	2	4	4	5
		0	2	8	4	7	7	6	0	1	6	9	5	2	5	3	5	9	2	4	1
		5	4	6	4	6	7	1	6	9	5	6	1	8	3	3	2	8	7	8	0
Stomach, Forestomach	A	A	A	A	A	A	+	+	+	+	M	+	+	+	A	+	+	+	+	+	+
Stomach, Glandular	A	A	A	A	A	A	+	A	+	+	M	+	+	+	A	A	+	+	+	+	+
Cardiovascular System																					
Blood Vessel	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																		X			
Heart	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+
Lymphoma Malignant		X																			
Pericardium, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																	X				
Endocrine System																					
Adrenal Cortex	A	+	+	A	+	+	+	A	+	+	M	+	+	+	+	+	+	+	+	+	+
Lymphoma Malignant		X																			
Adrenal Medulla	A	+	+	A	+	+	+	A	+	+	M	+	+	+	+	+	+	+	+	+	+
Lymphoma Malignant		X																			
Pheochromocytoma Benign																					
Pheochromocytoma Malignant																					
Islets, Pancreatic	A	M	I	+	+	+	+	A	+	+	M	+	+	+	+	A	+	+	+	+	+
Adenoma																			X		
Lymphoma Malignant			X																		
Parathyroid Gland	I	+	+	+	+	+	+	+	+	+	M	I	+	+	+	+	M	+	M	+	M
Lymphoma Malignant		X																			

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CD Rat Male F3 0PPM	DAY ON TEST	ANIMAL ID																										
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		2	4	4	4	4	4	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	
		6	0	6	9	9	9	0	5	8	0	0	3	6	6	8	9	2	4	4	5	5	5	5	5	5	5	
		0	2	8	4	7	7	6	0	1	6	9	5	2	5	3	5	9	2	4	1	1	1	0	2	2	5	
Pituitary Gland	A	+	+	A	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Lymphoma Malignant		X			X																							
Pars Distalis, Adenoma					X		X	X			X	X			X			X			X	X	X			X		
Pars Distalis, Adenoma, Multiple																												
Thyroid Gland	+	+	A	A	+	A	+	A	+	+	M	+	+	+	A	A	+	M	+	+	+	+	+	+	+	+	+	
Bilateral, C Cell, Adenoma																												
C Cell, Adenoma																												
Lymphoma Malignant		X			X																							
General Body System																												
NONE																												
Genital System																												
Coagulating Gland	A	A	A	A	+	+	+	A	+	+	M	+	+	+	A	+	+	A	+	+	+	+	+	+	+	+	+	
Lymphoma Malignant					X																							
Epididymis	+	A	+	+	+	+	+	+	+	+	M	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	
Lymphoma Malignant					X																							
Preputial Gland	+	+	+	A	+	+	+	+	+	+	M	+	+	+	A	+	+	A	+	+	+	+	+	+	+	+	+	
Lymphoma Malignant				X																								
Prostate						+	+				M		+															
Prostate, Dorsal Lobe	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymphoma Malignant				X																								
Prostate, Ventral Lobe	+	+	A	+	+	+	+	+	+	+	M	+	+	+	+	+	M	+	+	A	+	+	+	+	+	+	+	
Lymphoma Malignant			X																									

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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		2	4	4	4	4	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	
		6	0	6	9	9	9	0	5	8	0	0	3	6	8	9	2	4	4	5	5	
		0	2	8	4	7	7	6	0	1	6	9	5	2	5	3	5	9	2	4	1	
Rete Testes		+	+	+	+	M	M	+	+	+	+	M	+	+	+	+	+	M	M	+	+	
Seminal Vesicle		A	A	A	A	+	A	+	A	+	A	+	+	A	+	+	A	+	+	+	+	
Lymphoma Malignant																						
Testes		+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	
Interstit Cell, Adenoma																					X	
Seminoma Benign																						
Hematopoietic System																						
Bone Marrow		+	+	+	+	+	A	+	A	+	+	M	+	+	+	A	+	+	+	+	+	
Leukemia																					X	
Lymphoma Malignant																					X	
Lymph Node		+	+																			+
Axillary, Lymphoma Malignant																						X
Inguinal, Leukemia																						X
Inguinal, Lymphoma Malignant																						X
Lumbar, Lymphoma Malignant																						X
Renal, Lymphoma Malignant																						X
Lymph Node, Mandibular		+	+	+	+	+	A	+	+	+	+	M	+	+	+	A	A	+	+	+	+	
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																						X
Leukemia																						X
Lymphoma Malignant																						X
Lymph Node, Mesenteric		A	+	A	+	A	+	A	+	A	+	M	+	+	+	A	A	+	+	+	+	

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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		2	4	4	4	4	4	5	5	5	6	6	6	6	6	7	7	7	7	7	7	
		6	0	6	9	9	9	0	5	8	0	0	3	6	6	8	9	2	4	4	5	
		0	2	8	4	7	7	6	0	1	6	9	5	2	5	3	5	9	2	4	1	
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	1	1	1	1	1	2	2	2	2	3	3	4	4	6	9	9	9	9	9	
		5	0	2	4	4	4	5	0	3	9	9	5	9	1	4	2	3	4	4	7	
		5	4	6	4	6	7	1	6	9	5	6	1	8	3	3	2	8	7	8	0	
Lymphoma Malignant		X		X																		
Spleen		+	+	+	+	+	+	+	A	+	+	M	+	+	+	+	+	+	+	+	+	
Leukemia		X																				
Lymphoma Malignant		X		X																		
Sarcoma																						
Thymus		A	+	+	+	+	A	+	+	+	+	M	+	+	+	A	A	+	+	+	+	+
Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																		X				
Lymphoma Malignant		X		X																		
Integumentary System																						
Mammary Gland		A	I	I	A	I	A	+	A	+	I	M	I	+	+	A	M	I	+	+	+	+
Skin		+	A	+	+	+	+	+	A	+	+	M	+	+	+	+	+	+	+	+	+	+
Keratoacanthoma																						
Schwannoma Malignant																		X				
Squamous Cell Carcinoma																			X			
Musculoskeletal System																						
Bone, Cranium																		+				
Bone, Femur		+	A	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+
Skeletal Muscle																		+				
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																		X				
Nervous System																						

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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	4	4	4	4	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7
		6	0	6	9	9	9	0	5	8	0	0	3	6	6	8	9	2	4	5	5
		0	2	8	4	7	7	6	0	1	6	9	5	2	5	3	5	9	2	4	1
Brain, Brain Stem	A	+	+	A	A	+	+	A	+	+	M	+	+	+	A	+	+	+	+	+	+
Lymphoma Malignant		X																			
Brain, Cerebellum	A	+	+	A	A	+	+	A	+	+	M	+	+	+	A	+	+	+	+	+	+
Astrocytoma Malignant		X																			
Lymphoma Malignant		X																			
Brain, Cerebrum	A	+	+	A	A	+	+	A	+	+	M	+	+	+	A	+	+	+	+	+	+
Astrocytoma Malignant		X																			
Lymphoma Malignant		X																			
Respiratory System																					
Lung	A	+	+	A	A	+	+	A	+	+	M	+	+	+	A	+	+	+	+	+	+
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site		X																			
Lymphoma Malignant		X																			
Nose	A	+	+	A	A	+	+	A	+	+	M	+	+	+	A	A	+	+	+	+	+
Lymphoma Malignant		X																			
Trachea	A	+	+	A	A	+	+	A	+	+	M	+	+	+	A	A	+	+	+	+	+
Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site		X																			
Lymphoma Malignant		X																			
Special Senses System																					
Eye	A										M	+	+	A	A	+	A	+	+	+	+
Harderian Gland	A										M	+	+	A	A	+	+	+	+	+	+

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CD Rat Male F3 0PPM	DAY ON TEST	0 0																			
		2 4 4 4 4 4 5 5 5 6 6 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7																			
		6 0 6 9 9 9 0 5 8 0 0 3 6 6 8 9 2 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5																			
		0 2 8 4 7 7 6 0 1 6 9 5 2 5 3 5 9 2 4 1 1 1 1 0 2 2 5 5 4 4 5																			
		0 0																			
	ANIMAL ID	0 0																			
	0 1 1 1 1 1 1 2 2 2 2 3 3 3 4 4 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9																				
	5 0 2 4 4 4 5 0 3 9 9 5 9 1 4 2 3 4 4 7 7 7 7 7 7 9 9 9 4 4 4 7																				
	5 4 6 4 6 7 1 6 9 5 6 1 8 3 3 2 8 7 8 0 1 2 3 4 0 1 4 5 6 7 2																				

Urinary System

Kidney

Lymphoma Malignant

Urinary Bladder

Lymphoma Malignant

SYSTEMIC LESIONS

Multiple Organ

Leukemia

Lymphoma Malignant

A + + A + A + A + + M + + + A + + + + + + + + + + + + + + + + + + +

X X

A + I A + A + A + + M + + + A + + + + + + + + + + + + + + + + + + +

X

+ +

X

X X

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| CD Rat Male
F3 0PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 4 | 4 | 3 | 3 | 3 | 2 | 5 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | | 9 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 9 | 0 |
| | | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | X |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 |
| Leiomyosarcoma | | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | X |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | | | 1 |
| Hepatocellular Carcinoma | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia | | | | | | | | | | | | | | | | | | | | 1 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | 2 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | 1 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | 2 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:22

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male
F3 0PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | ANIMAL ID | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 5 | 4 | 5 | 5 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 5 | 4 | 5 | 5 |
| Stomach, Forestomach | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiovascular System | | | | | | | | | | | | | | | | | | | | | | | |
| Blood Vessel | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | | |
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | |
| Pericardium, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | | |
| Endocrine System | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | |
| Pheochromocytoma Benign | X | | X | | X | | | | | | | | | | | | | | | X | | | |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | X | | X | | | | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | + | + | + | M | + | I | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

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Experiment Number: 99930-93

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Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:22

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male
F3 0PPM | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---------|--|--|--|--|--|--|--|-----|---|--|---------|--|----|
| | | 7 | 5 | 5 5 5 5 5 5 5 5 5 6 6 6 4 4 3 3 3 3 2 5 4 5 | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 1 | 0 0 1 | 9 9 3 3 3 3 3 3 3 5 7 7 7 7 7 8 8 8 9 0 1 2 | 8 9 0 1 2 3 4 5 6 4 5 6 7 8 9 0 1 2 9 9 0 9 | *TOTALS | | | | | | | | | | | | | |
| | Pituitary Gland | + | | | | | | | | | | | | | | | | | 49 |
| | Lymphoma Malignant | | | | | | | | | | | | | | | | | | 2 |
| | Pars Distalis, Adenoma | | | | | | | | | | | | | | X | | X X X X | | 16 |
| | Pars Distalis, Adenoma, Multiple | | | | | | | | | | | | | | X | | | | 1 |
| General Body System | Thyroid Gland | + | | | | | | | | | | | | | | | | | 44 |
| | Bilateral, C Cell, Adenoma | | | | | | | | | | | | | X | | | | | 1 |
| | C Cell, Adenoma | | | | | | | | | | | | | | | | | | 1 |
| | Lymphoma Malignant | | | | | | | | | | | | | | | | | | 2 |
| Genital System | NONE | | | | | | | | | | | | | | | | | | |
| | Coagulating Gland | + | | | | | | | | | | | | | | | | | 44 |
| | Lymphoma Malignant | | | | | | | | | | | | | | | | | | 1 |
| | Epididymis | + | | | | | | | | | | | | | | | | | 49 |
| | Lymphoma Malignant | | | | | | | | | | | | | | | | | | 1 |
| | Preputial Gland | + | | | | | | | | | | | | | | | | | 48 |
| | Lymphoma Malignant | | | | | | | | | | | | | | | | | | 2 |
| | Prostate | | | | | | | | | | | | | + + | | | | | 6 |
| | Prostate, Dorsal Lobe | + | | | | | | | | | | | | | | | | | 51 |
| | Lymphoma Malignant | | | | | | | | | | | | | | | | | | 2 |
| | Prostate, Ventral Lobe | + | | | | | | | | | | | | | | | | | 48 |
| | Lymphoma Malignant | | | | | | | | | | | | | | | | | | 2 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

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Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:22

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male
F3 0PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rete Testes | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Seminal Vesicle | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | 1 | |
| Testes | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Interstit Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | 1 | |
| Seminoma Benign | | | | | | | | | | | | | | | | | | | | | 1 | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Leukemia | | | | | | | | | | | | | | | | | | | | | 1 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | 2 | |
| Lymph Node | | + | | | | | | | | | | | | | | | | | | | 13 | |
| Axillary, Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | 1 | |
| Inguinal, Leukemia | | | | | | | | | | | | | | | | | | | | | 1 | |
| Inguinal, Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | 1 | |
| Lumbar, Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | 1 | |
| Renal, Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | 1 | |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Fibrous Histiocytoma, Metastatic, Uncertain | | | | | | | | | | | | | | | | | | | | | 1 | |
| Primary Site | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia | | | | | | | | | | | | | | | | | | | | | 1 | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | 2 | |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

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Time Report Requested: 12:52:22

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male
F3 0PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | ANIMAL ID | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 4 | 4 | 3 | 3 | 3 | 2 | 5 | 4 | 5 |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Lymphoma Malignant | | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| Sarcoma | | 9 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 9 | 0 | 0 |
| Thymus | | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 9 | 0 |
| Adventitia, Fibrous Histiocytoma, Metastatic,
Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | | |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | |
| Bone, Cranium | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | |
| Fibrous Histiocytoma, Metastatic, Uncertain
Primary Site | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:23

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male
F3 0PPM | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---------|---|----|---|---|---|----|---|---|----|---|---|----|---|----|---|----|----|---|---|----|---|----|---|---|----|
| | | 7 | 5 | 5 5 5 5 5 5 5 5 5 6 6 6 4 4 3 3 3 3 2 5 4 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 1 | 0 0 1 | 9 9 3 3 3 3 3 3 3 5 7 7 7 7 8 8 8 8 9 0 1 2 | 8 9 0 1 2 3 4 5 6 4 5 6 7 8 9 0 1 2 9 9 0 9 | *TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0 | 1 | 0 0 1 | 9 9 3 3 3 3 3 3 3 5 7 7 7 7 8 8 8 8 9 0 1 2 | 8 9 0 1 2 3 4 5 6 4 5 6 7 8 9 0 1 2 9 9 0 9 | 46 | 1 | 46 | 1 | 2 | 2 | 45 | 1 | 1 | 48 | 1 | 2 | 46 | 2 | 45 | 1 | 1 | 48 | 1 | 2 | 46 | 2 | 45 | 1 | 2 | 37 |
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 | | | | | | | | | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 | | | | | | | | | |
| Astrocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 | | | | | | | | | |
| Astrocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | X | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | | | | | | | | | |
| Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 | | | | | | | | | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 | | | | | | | | | |
| Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | |
| Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 37 | | | | | | | | | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

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Experiment Number: 99930-93

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CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:23

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male
F3 0PPM

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | |
|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 5 | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | |
| | 0 0 1 | | | | | | | | | | | | | | | | | |
| | 9 9 3 3 3 3 3 3 3 3 5 7 7 7 7 7 8 8 8 8 9 0 | | | | | | | | | | | | | | | | | |
| | 8 9 0 1 2 3 4 5 6 4 5 6 7 8 9 0 1 2 9 9 0 9 | | | | | | | | | | | | | | | | | |

*TOTALS

Urinary System

Kidney + 46

Lymphoma Malignant + 2

Urinary Bladder + 45

Lymphoma Malignant + 1

SYSTEMIC LESIONS

Multiple Organ + 52

Leukemia + 1

Lymphoma Malignant + 2

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

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Time Report Requested: 12:52:23
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Male
F3 5PPM TO CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 2 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 8 | 9 | 2 | 7 | 8 | 9 | 1 | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 4 | 5 | 2 | 0 | 7 | 3 | 7 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 5 | 5 | 4 | 4 | 4 | 4 |
| | | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 5 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | |
| | | 2 | 5 | 7 | 2 | 7 | 8 | 1 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 4 | 4 | 5 | 5 | 5 | |
| | | 0 | 9 | 7 | 7 | 7 | 2 | 2 | 0 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 2 | 3 | 4 | 5 | 8 | 9 | 0 | 1 | |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | + | A | A | A | A | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | + | A | A | A | A | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | | | | | | | | | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum | + | A | A | A | A | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | + | A | A | A | A | A | A | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | A | A | A | A | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | + | A | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

X

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | A | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adrenal Medulla | + | + | + | A | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:23

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male
F3 5PPM TO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|--|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | | 0 | 2 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | | |
| | | 8 | 9 | 2 | 7 | 8 | 9 | 1 | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | |
| | | 4 | 5 | 2 | 0 | 7 | 3 | 7 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 5 | 5 | 4 | 4 | 4 | | | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Parathyroid Gland | | M | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | | |
| Pituitary Gland | | + | + | + | A | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Pars Distalis, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | X X | |
| Thyroid Gland | | + | A | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |

General Body SystemTissue NOS
Abdominal, Sarcoma**Genital System**

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coagulating Gland | | + | A | M | A | A | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Epididymis | | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Preputial Gland | | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Prostate | | + | | A | A | A | | | | | | | | | | | | | | | | | | | | |
| Prostate, Dorsal Lobe | | + | + | + | A | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Prostate, Ventral Lobe | | + | + | A | A | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Rete Testes | | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Seminal Vesicle | | + | A | A | A | A | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Testes | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:24

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 5PPM TO CTL**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 2 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 8 | 9 | 2 | 7 | 8 | 9 | 1 | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 5 | 2 | 0 | 7 | 3 | 7 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 5 | 5 | 4 | 4 | 4 | 5 | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 5 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2 | 5 | 7 | 2 | 7 | 8 | 1 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 4 | 4 | 5 | 5 | 5 | 7 | 7 |
| | 0 | 9 | 7 | 7 | 2 | 2 | 2 | 0 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 2 | 3 | 4 | 5 | 8 | 9 | 0 | 1 | 2 | 3 |

Interstitial Cell, Adenoma

Mesothelioma Malignant

X

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Lymph Node, Mandibular | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric | + | + | + | A | A | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Thymus | + | A | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | I | A | I | I | A | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Fibroma | | | | | | | | | | | | | | | | | | | | | | | | | | + |

X

Musculoskeletal System

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Nervous System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem | + | + | A | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Brain, Cerebellum | + | + | A | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Brain, Cerebrum | + | + | A | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Astrocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | + |

X

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:24

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 5PPM TO CTL**

| DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 2 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 8 | 9 | 2 | 7 | 8 | 9 | 1 | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 5 | 2 | 0 | 7 | 3 | 7 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 5 | 5 | 4 | 4 | 4 | 4 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 5 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2 | 5 | 7 | 2 | 7 | 8 | 1 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 9 | 4 | 4 | 5 | 5 | 5 | 7 | 7 |
| | 0 | 9 | 7 | 7 | 2 | 2 | 2 | 0 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 2 | 3 | 4 | 5 | 8 | 9 | 0 | 1 | 2 |

Respiratory System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Lung | + | A | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | X | | | | | | | |
| Carcinoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | X | | | | | | |
| Nose | + | + | A | A | A | A | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | + | A | A | A | A | A | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

Special Senses System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|--|--|--|--|--|--|---|--|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Eye | | | | | | | A | | | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Retrobulbar, Carcinoma | | | | | | | | | | | | | | | | | | | X | | | | | | | |
| Harderian Gland | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lacrimal Gland | | | | | | | | | | | | | | | | | | | | | | | | | | |

Urinary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Urethra | | | | | | | | | | | | | | | | | | | | | | | | + | + | + |
| Urinary Bladder | + | A | + | A | A | A | + | A | A | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | |

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | X | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:24
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Male
F3 5PPM TO CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|---|-------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 1 | 1 | 0 | 0 | 1 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | 7 | 0 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| | | 8 | 0 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 2 | |
| | | *TOTALS | | | | | | | | | | | | | | | | | | | |

Alimentary System

| | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 42 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 42 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Hepatocellular Carcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Mesentery | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |

Endocrine System

| | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

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I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

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Time Report Requested: 12:52:24

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male
F3 5PPM TO CTL

| DAY ON TEST | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 1 | 1 | 0 | 1 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 7 | 0 | 3 | 3 | 3 | 4 | 4 | 4 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 8 | 0 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

***TOTALS**

| | | |
|-------------------------|---|----|
| Pheochromocytoma Benign | X | 3 |
| Islets, Pancreatic | + | 49 |
| Adenoma | X | 3 |
| Parathyroid Gland | + | 46 |
| Pituitary Gland | + | 46 |
| Pars Distalis, Adenoma | X | 18 |
| Thyroid Gland | + | 46 |

General Body System

| | | |
|--------------------|---|---|
| Tissue NOS | + | 1 |
| Abdominal, Sarcoma | X | 1 |

Genital System

| | | |
|------------------------|---|----|
| Coagulating Gland | + | 43 |
| Epididymis | + | 48 |
| Mesothelioma Malignant | | 1 |
| Preputial Gland | + | 48 |
| Prostate | + | 8 |
| Prostate, Dorsal Lobe | + | 47 |
| Mesothelioma Malignant | | 1 |
| Prostate, Ventral Lobe | + | 46 |
| Rete Testes | + | 48 |
| Seminal Vesicle | + | 43 |
| Testes | + | 50 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:24
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Male
F3 5PPM TO CTL

| DAY ON TEST | CD Rat Male | | | | | | | | | | | | | | | | | | *TOTALS |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 1 | 1 | 0 | 0 | |
| Interstit Cell, Adenoma | | | | | | | | | | | | | | | | | | X | 1 |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | 1 |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Lymph Node | + | + | + | | | | | | | | | | | | | | | | 9 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 48 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 46 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 49 |
| Sarcoma | | | | | | | | | | | | | | | | | | X | 1 |
| Thymus | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | M | 45 |
| Integumentary System | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 43 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 |
| Fibroma | | | | | | | | | | | | | | | | | | | 1 |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 |
| Nervous System | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 46 |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 46 |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 46 |
| Astrocytoma Malignant | | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

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Date Report Requested: 10/17/2014
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First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Male
F3 5PPM TO CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 1 | 1 | 0 | 0 | 1 |
| | | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | 7 | 0 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | | 8 | 0 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 2 |

*TOTALS

Respiratory System

| | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Uncertain Primary | | | | | | | | | | | | | | | | | | | | 1 |
| Site | | | | | | | | | | | | | | | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | X |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 |

Special Senses System

| | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Retrobulbar, Carcinoma | | | | | | | | | | | | | | | | | | | | 1 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Lacrimal Gland | | | | | | | | | | | | | | | | | | | | 2 |

Urinary System

| | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Urethra | | | | | | | | | | | | | | | | | | | | 2 |
| Urinary Bladder | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

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| CD Rat Male
F3 100PPM TO CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 5 | 3 | 2 | 4 | 5 | 5 | 5 | 7 | 9 | 4 | 5 | 6 | 6 | 8 | 8 | 0 | 1 | 3 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 1 | 8 | 7 | 4 | 0 | 5 | 0 | 3 | 5 | 9 | 6 | 5 | 1 | 0 | 2 | 5 | 7 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| | | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 |
| | | 1 | 8 | 8 | 0 | 0 | 1 | 2 | 7 | 6 | 8 | 0 | 0 | 3 | 4 | 8 | 3 | 4 | 8 | 8 | 8 | 9 | 9 | 0 | 0 |
| | | 6 | 9 | 8 | 3 | 7 | 4 | 8 | 9 | 7 | 6 | 2 | 3 | 7 | 0 | 1 | 4 | 6 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | M | | | | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | A | A | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | X | | | | | | | | | | | | | | | | | |
| Pancreas | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Acinar Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | X |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Tongue | | | | | | | + | | | | | | | | | | | | | | | | | |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

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I ..Insufficient tissue

Experiment Number: 99930-93
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 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male
F3 100PPM TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 3 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 5 | 3 | 2 | 4 | 5 | 5 | 7 | 9 | 4 | 5 | 6 | 6 | 8 | 8 | 0 | 1 | 3 | 5 | 5 | 5 | 5 |
| | | 1 | 8 | 7 | 4 | 0 | 5 | 0 | 3 | 5 | 9 | 6 | 5 | 1 | 0 | 2 | 5 | 7 | 1 | 1 | 2 | 1 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | | 1 | 8 | 8 | 0 | 0 | 1 | 2 | 7 | 6 | 8 | 0 | 0 | 3 | 4 | 8 | 3 | 4 | 8 | 8 | 9 | 0 |
| | | 6 | 9 | 8 | 3 | 7 | 4 | 8 | 9 | 7 | 6 | 2 | 3 | 7 | 0 | 1 | 4 | 6 | 3 | 4 | 5 | 6 |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | X | | | | | |
| Leukemia Mononuclear | | | | | | X | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | A | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | X | | | | | | | | | | | | | | | | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | X | | | | X | | | X | |
| Islets, Pancreatic | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | X | | | | |
| Carcinoma | | | | | | | | | | | | | | | | | | | X | | | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | + |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pars Distalis, Adenoma | | | | | | X | | | X | | X | | X | | X | | X | X | X | X | X | X |
| Thyroid Gland | A | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

General Body System

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coagulating Gland | M | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

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| CD Rat Male
F3 100PPM TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 3 | 2 | 4 | 5 | 5 | 5 | 7 | 9 | 4 | 5 | 6 | 6 | 8 | 8 | 0 | 1 | 3 | 5 | 5 | 5 | 5 |
| | 1 | 8 | 7 | 4 | 0 | 5 | 0 | 3 | 5 | 9 | 6 | 5 | 1 | 0 | 2 | 5 | 7 | 1 | 1 | 2 | 1 | 1 |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 |
| | | 1 | 8 | 8 | 0 | 0 | 1 | 2 | 7 | 6 | 8 | 0 | 0 | 3 | 4 | 8 | 3 | 4 | 8 | 8 | 9 | 0 |
| | | 6 | 9 | 8 | 3 | 7 | 4 | 8 | 9 | 7 | 6 | 2 | 3 | 7 | 0 | 1 | 4 | 6 | 3 | 4 | 5 | 6 |
| Epididymis | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Preputial Gland | M | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Carcinoma | | | | | | | | | | | | | | | | | X | | | | | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | X | | | | |
| Prostate | M | | | | | | | | | | | | | | | | | | | | | + |
| Prostate, Dorsal Lobe | M | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | |
| Prostate, Ventral Lobe | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | |
| Rete Testes | M | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + |
| Seminal Vesicle | M | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | |
| Testes | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | |
| Lumbar, Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

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| CD Rat Male
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|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 3 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 5 | 3 | 2 | 4 | 5 | 5 | 7 | 9 | 4 | 5 | 6 | 6 | 8 | 8 | 0 | 1 | 3 | 5 | 5 | 5 | 5 |
| | | 1 | 8 | 7 | 4 | 0 | 5 | 0 | 3 | 5 | 9 | 6 | 5 | 1 | 0 | 2 | 5 | 7 | 1 | 1 | 2 | 1 |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 7 | 9 | 9 | 9 | 9 | 9 | 9 |
| | | 1 | 8 | 8 | 0 | 0 | 1 | 2 | 7 | 6 | 8 | 0 | 0 | 3 | 4 | 8 | 3 | 4 | 8 | 8 | 9 | 9 |
| | | 6 | 9 | 8 | 3 | 7 | 4 | 8 | 9 | 7 | 6 | 2 | 3 | 7 | 0 | 1 | 4 | 6 | 3 | 4 | 5 | 6 |
| Mediastinal, Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | |
| Renal, Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular Histiocytic Sarcoma | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric Histiocytic Sarcoma | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |
| Thymus | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland Adenocarcinoma | A | + | + | + | A | I | + | M | I | I | + | + | + | + | + | + | + | + | + | + | + | + |
| Skin | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lipoma | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | X | | | X | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | + |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebellum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:26
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male
F3 100PPM TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 3 | 2 | 4 | 5 | 5 | 7 | 9 | 4 | 5 | 6 | 6 | 8 | 8 | 0 | 1 | 3 | 5 | 5 | 5 | 5 | 5 |
| | 1 | 8 | 7 | 4 | 0 | 5 | 0 | 3 | 5 | 9 | 6 | 5 | 1 | 0 | 2 | 5 | 7 | 1 | 1 | 2 | 1 | 1 |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brain, Cerebrum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | |
| Lung | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | X | | | | | | | | | | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Squamous Cell Carcinoma | | | | | | | | X | | | | | | | | | | | | | | |
| Trachea | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | |
| Eye | A | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | A | | | | | | | | | | | | | | | | | | | | | |
| Lacrimal Gland | | | | | | | | | | | | | | | | | | | | | | |
| Zymbal's Gland | | | | | | | + | | | | | | | | | | | | | | | |
| Adenoma | | | | | | | X | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | X | | | | | | | | | | | | | | | |
| Urethra | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | |
| * ..Total animals with tissue examined microscopically; Total animals with tumor | | | | | | | | | | | | | | | | | | | | | | |
| + ..Tissue examined microscopically | | | | | | | | | | | | | | | | | | | | | | |
| X ..Lesion present | | | | | | | | | | | | | | | | | | | | | | |
| I ..Insufficient tissue | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:26

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 100PPM TO CTL**

| DAY ON TEST | CD Rat Male | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 3 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 3 | 2 | 4 | 5 | 5 | 7 | 9 | 4 | 5 | 6 | 6 | 8 | 8 | 0 | 1 | 3 | 5 | 5 | 5 | 5 |
| | 1 | 8 | 7 | 4 | 0 | 5 | 0 | 3 | 5 | 9 | 6 | 5 | 1 | 0 | 2 | 5 | 7 | 1 | 1 | 2 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | 1 | 8 | 8 | 0 | 0 | 1 | 2 | 7 | 6 | 8 | 0 | 0 | 3 | 4 | 8 | 3 | 4 | 8 | 8 | 9 | 0 |
| | 6 | 9 | 8 | 3 | 7 | 4 | 8 | 9 | 7 | 6 | 2 | 3 | 7 | 0 | 1 | 4 | 6 | 3 | 4 | 5 | 6 |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | | X | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:26
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Male
F3 100PPM TO CTL

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | | | | | | | | | | | | | | | | | | |
| | 5 | | | | | | | | | | | | | | | | | | |
| | 5 5 5 4 4 4 5 5 5 5 5 6 5 5 5 6 4 4 4 4 4 | | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 8 | 8 | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 1 |
| | 4 | 5 | 6 | 6 | 7 | 8 | 9 | 0 | 1 | 3 | 6 | 3 | 4 | 5 | 6 | 7 | 5 | 6 | 1 |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | 45 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | X | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Acinar Cell, Adenoma | | | | | | | X | | | | | | | | | | | | 2 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | X | | | | | 1 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Tongue | | | | | | | | | | | | | | | | | | | 1 |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:26

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 100PPM TO CTL**

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | |
|-------------|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 5 5 5 5 4 4 4 5 5 5 5 5 6 5 5 5 6 4 4 6 | 0 | | | | | | | | | | | | | | | | | |
| | 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 0 | | | | | | | | | | | | | | | | | |
| | 0 0 0 0 5 5 5 6 6 6 7 8 9 0 1 3 6 3 4 5 6 7 5 | 0 | | | | | | | | | | | | | | | | | |
| | 4 5 6 6 7 8 9 0 1 3 6 3 4 5 6 7 5 6 7 5 6 1 | 0 | | | | | | | | | | | | | | | | | |

*TOTALS

Endocrine System

| | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Adenoma | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | 1 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | 1 |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | X | | | | 4 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Adenoma | | | | | | | | | | | | | | | | X | | | 2 |
| Carcinoma | | | | | | | | | | | | | | | | | X | | 1 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Adenoma | | | | | | | | | | | | | | | X | | | | 1 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | 48 |
| Pars Distalis, Adenoma | X | | X | X | X | | | | X | X | | | | | | X | | | 17 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |

General Body System

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Coagulating Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | X | | | | 1 |
| Sarcoma, Metastatic, Uncertain Primary Site | | | | | X | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
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First Dose M/F: NA / NA
Lab: NCTR

CD Rat Male
F3 100PPM TO CTL

| | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|---|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 5 | 6 | 4 | 6 | | |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | 5 |
| Prostate | | | | | | | | | | | | | | | | | | | | 6 |
| Prostate, Dorsal Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | 1 |
| Sarcoma, Metastatic, Uncertain Primary Site | X | | | | | | | | | | | | | | | | | | | 1 |
| Prostate, Ventral Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Adenoma | | | | | | | | | | | | | | | | | | | | 1 |
| Rete Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Adenoma | | | | | | | | | | | | | | | | | | | | 1 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | 1 |
| Sarcoma | | | | | | | | | | | | | | | | | | | | 1 |
| Sarcoma, Metastatic, Uncertain Primary Site | X | | | | | | | | | | | | | | | | | | | 1 |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node | + | | | | | | | | | | | | | | | | | | | 18 |
| Lumbar, Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:26
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Male
F3 100PPM TO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|----------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 5 | 6 | 4 | 6 | 6 | 6 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 5 | 5 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 8 | 8 | 4 | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 1 |
| 4 | 5 | 6 | 6 | 7 | 8 | 9 | 0 | 1 | 3 | 6 | 3 | 4 | 5 | 6 | 7 | 5 | 6 | 6 | 1 |
| *TOTALS | | | | | | | | | | | | | | | | | | | |
| Mediastinal, Histiocytic Sarcoma | | | | | | | | | | | | | | | | X | | | 1 |
| Renal, Histiocytic Sarcoma | | | | | | | | | | | | | | | | X | | | 1 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | X | | | 1 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | X | | | 1 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | X | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | 1 |
| Thymus | + | + | | + | | + | + | + | + | + | + | + | + | + | | + | + | + | 41 |
| Integumentary System | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Lipoma | | | | | | | | | | | | | | | | X | | | 1 |
| Squamous Cell Carcinoma | | | | | | | X | | | | | | | | | | | | 3 |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Nervous System | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:27
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Male
F3 100PPM TO CTL

| | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS | |
|------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 5 | 6 | 4 | 6 | 4 | 6 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 8 | 8 | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 8 | 1 | |
| | 4 | 5 | 6 | 6 | 7 | 8 | 9 | 0 | 1 | 3 | 6 | 3 | 4 | 5 | 6 | 7 | 5 | 6 | 1 | | |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | X | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | 1 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 | |
| Lacrimal Gland | | | | | | | | | | | | | | | | | | | | 2 | |
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | 1 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | 1 | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | X | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | 1 |
| Urethra | | | | | | | | | | | | | | | | | | | | | 2 |
| Urinary Bladder | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | 47 | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:27

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male
F3 100PPM TO CTL

| DAY ON TEST | CD Rat Male | | | | | | | | | | | | | | | | | |
|-------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 6 | 4 | 6 | 6 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 8 | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 1 |
| | 4 | 5 | 6 | 6 | 7 | 8 | 9 | 0 | 1 | 3 | 6 | 3 | 4 | 5 | 6 | 7 | 5 | 6 |

*TOTALS

| | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| | | | | | | | | | | | | | | | X | | | 1 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

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Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:27

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male
F3 500PPM TO CTL

| DAY ON TEST | CD Rat Male | | | | | | | | | | | | | | | | | | | |
|-------------|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | F3 500PPM TO CTL | | | | | | | | | | | | | | | | | | | |
| | ANIMAL ID | | | | | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 5 | 7 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 0 | 9 | 8 | 9 | 2 | 4 | 1 | 4 | 9 | 6 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 2 | 1 | 1 | 4 |
| 7 | 9 | 4 | 9 | 0 | 9 | 5 | 3 | 6 | 7 | 6 | 4 | 5 | 3 | 6 | 7 | 8 | 9 | 7 | 8 | 9 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Granulocytic | | | | | X | | | | | | | | | | | | | | | |
| Intestine Large, Colon | + | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Granulocytic | | | | | X | | | | | | | | | | | | | | | |
| Intestine Large, Rectum | + | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | + | + | + | A | A | A | A | + | + | A | A | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | A | + | + | + | A | A | A | + | + | A | A | + | + | + | + | + | + | + | + | + |
| Leukemia Granulocytic | | | | | X | | | | | | | | | | | | | | | |
| Intestine Small, Jejunum | A | + | + | A | A | A | A | + | + | A | A | + | + | + | + | + | + | + | + | + |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | |
| Leukemia Granulocytic | | | | | X | | | | | | | | | | | | | | | |
| Liver | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | X | | | | | | | | | |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | | | |
| Leukemia Granulocytic | | | | | X | | | | | | | | | | | | | | | |
| Pancreas | + | + | + | + | A | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + |
| Carcinoma | | | | | X | | | | | | | | | | | | | | | |
| Leukemia Granulocytic | | | | | X | | | | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + |
| Carcinoma, Metastatic, Pancreas | | | | | X | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:27
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male
F3 500PPM TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 5 | 7 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 0 | 9 | 8 | 9 | 2 | 4 | 1 | 4 | 9 | 6 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 2 | 1 | 1 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| | | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 5 | 8 | 9 | 0 | 8 | 2 | 3 | 4 | 5 | 7 | 3 | 3 | 8 | 8 | 8 | 0 | 0 | 1 |
| | | 7 | 9 | 4 | 9 | 0 | 9 | 5 | 3 | 6 | 7 | 6 | 4 | 5 | 3 | 6 | 7 | 8 | 9 | 7 | 8 |
| Leukemia Granulocytic | | X | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular | | + | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiovascular System | | | | | | | | | | | | | | | | | | | | | |
| Blood Vessel | | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart | | + | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Granulocytic | | X | | | | | | | | | | | | | | | | | | | |
| Endocrine System | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Granulocytic | | | X | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | | + | + | A | + | A | M | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Pheochromocytoma Benign | | | | | | | | | | | | | | X | | | | | | | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Granulocytic | | | X | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | M | + | M | + | M | + | M | + | + |
| Pituitary Gland | | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pars Distalis, Adenoma | | | | | X | | | | | | | | | | | X | | | X | X | |
| Pars Distalis, Adenoma, Multiple | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | | + | + | + | + | A | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | X | | | | |
| C Cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Granulocytic | | X | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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Experiment Number: 99930-93
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 CAS Number: 446-72-0

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 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male
F3 500PPM TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 5 | 7 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 0 | 9 | 8 | 9 | 2 | 4 | 1 | 4 | 9 | 6 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 4 | 4 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 5 | 8 | 9 | 0 | 8 | 2 | 3 | 4 | 5 | 7 | 3 | 3 | 8 | 8 | 8 | 8 | 0 | 0 | 1 | 1 | 5 | 5 |
| | | 7 | 9 | 4 | 9 | 0 | 9 | 5 | 3 | 6 | 7 | 6 | 4 | 5 | 3 | 6 | 7 | 8 | 9 | 7 | 8 | 9 | 0 | 1 | 2 |
| | | 7 | 9 | 4 | 9 | 0 | 9 | 5 | 3 | 6 | 7 | 6 | 4 | 5 | 3 | 6 | 7 | 8 | 9 | 7 | 8 | 9 | 0 | 1 | 2 |

General Body System

Tissue NOS

+

Squamous Cell Carcinoma

X

Genital System

Coagulating Gland

+

Leukemia Granulocytic

X

Epididymis

+

Leukemia Granulocytic

X

Mesothelioma Malignant

X

Preputial Gland

M

Leukemia Granulocytic

X

Squamous Cell Carcinoma

X

Prostate

+

Prostate, Dorsal Lobe

+

Adenocarcinoma

Leukemia Granulocytic

X

Prostate, Ventral Lobe

+

Adenoma

Leukemia Granulocytic

X

Rete Testes

+

Seminal Vesicle

+

Testes

+

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

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First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male
F3 500PPM TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 5 | 7 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 0 | 9 | 8 | 9 | 2 | 4 | 1 | 4 | 9 | 6 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 4 | 4 |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 5 | 8 | 9 | 0 | 8 | 2 | 3 | 4 | 5 | 7 | 3 | 3 | 8 | 8 | 8 | 0 | 0 | 1 | 1 | 5 | |
| | | 7 | 9 | 4 | 9 | 0 | 9 | 5 | 3 | 6 | 7 | 6 | 4 | 5 | 3 | 6 | 7 | 8 | 9 | 7 | 8 | 9 | 0 | |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | X | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | A | + | + | + | + | A | + | + | + | + | + | I | + | + | + | + | + | |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | |
| Inguinal, Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | | | | | | |
| Lumbar, Squamous Cell Carcinoma, Metastatic, Preputial Gland | | | | | | | | | | | | | | | | | | | | | | | | |
| Thoracic, Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mesenteric | | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen | | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | | | | | | |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + | + | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | | | | | | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | I | + | I | + | + | I | + | A | + | I | A | + | + | + | + | + | I | + | + | + | I | + | |
| Fibroadenoma | | | | | | | | | | | | | | | | | | | | | | | X | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:28
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Male
F3 500PPM TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 5 | 7 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 0 | 9 | 8 | 9 | 2 | 4 | 1 | 4 | 9 | 6 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 2 | 1 | 1 | 4 | |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | |
| | | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 5 | 8 | 9 | 0 | 8 | 2 | 3 | 4 | 5 | 7 | 3 | 3 | 3 | 8 | 8 | 8 | 0 | 1 | 5 | |
| | | 7 | 9 | 4 | 9 | 0 | 9 | 5 | 3 | 6 | 7 | 6 | 4 | 5 | 3 | 6 | 7 | 8 | 9 | 7 | 8 | 9 | |
| Fibroma | | | | | | | | | | | | | | | | | | | | | | | |
| Skin | | | | | | | | | | | | | | | | | | | | | | | |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | | | | | | |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | | | | | |
| Neurofibrosarcoma | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | | | | | | |
| Chordoma | | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | | | | | | | | | | | | | | | | | | | | | | | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | | | | | | | | | | | | | | | | | | | | | | | |
| Reticulosis Malignant | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Cerebellum | | | | | | | | | | | | | | | | | | | | | | | |
| Reticulosis Malignant | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Cerebrum | | | | | | | | | | | | | | | | | | | | | | | |
| Reticulosis Malignant | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | |
| * ..Total animals with tissue examined microscopically; Total animals with tumor | | | | | | | | | | | | | | | | | | | | | | | |
| + ..Tissue examined microscopically | | | | | | | | | | | | | | | | | | | | | | | |
| X ..Lesion present | | | | | | | | | | | | | | | | | | | | | | | |
| I ..Insufficient tissue | | | | | | | | | | | | | | | | | | | | | | | |
| M ..Missing tissue | | | | | | | | | | | | | | | | | | | | | | | |
| A ..Autolysis precludes evaluation | | | | | | | | | | | | | | | | | | | | | | | |
| BLANK ..Not examined microscopically | | | | | | | | | | | | | | | | | | | | | | | |

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:29
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Male
F3 500PPM TO CTL | DAY ON TEST | P04: NEOPLASMS BY INDIVIDUAL ANIMAL | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | ANIMAL ID | 0 | 0 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 5 | 7 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 0 | 9 | 8 | 9 | 2 | 4 | 1 | 4 | 9 | 6 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 4 |
| | | 7 | 9 | 4 | 9 | 0 | 9 | 5 | 3 | 6 | 7 | 6 | 4 | 5 | 7 | 3 | 3 | 8 | 8 | 8 | 9 | 7 | 8 |
| Lung | | + | + | + | + | A | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | | + | + | + | + | A | A | A | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Adventitia, Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | | + | + | + | + | A | A | A | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | | | | | + | | | | | | | | | | | | | | | | | |
| Adventitia, Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | | | | | | + | | | | | | | | | | | | | | | | | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | |
| Adventitia, Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | |
| Lacrimal Gland | | | | | | | | | | | | | | | | | + | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | A | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Adventitia, Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | | | | | |
| Transit Epithe, Papilloma | | | | | | | | | | | | | | | | | | | | | | | |
| Urethra | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | | + | + | + | + | A | + | + | A | + | A | + | + | + | + | + | M | + | + | + | + | + | + |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

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BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:29

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male
F3 500PPM TO CTL

| DAY ON TEST | CD Rat Male | | | | | | | | | | | | | | | | | | | |
|-------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 7 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 9 | 8 | 9 | 2 | 4 | 1 | 4 | 9 | 6 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 2 | 1 | 1 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 5 | 8 | 9 | 0 | 8 | 2 | 3 | 4 | 5 | 7 | 3 | 3 | 3 | 8 | 8 | 8 | 0 | 1 |
| | 7 | 9 | 4 | 9 | 0 | 9 | 5 | 3 | 6 | 7 | 6 | 4 | 5 | 3 | 6 | 7 | 8 | 9 | 7 | 8 |

SYSTEMIC LESIONS

Multiple Organ

+

Leukemia Granulocytic

X

Mesothelioma Malignant

X

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
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P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:29
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Male
F3 500PPM TO CTL

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 3 | 2 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | 8 | 8 | 8 | 0 | 0 | 4 | 4 | 5 | 5 | 5 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 1 |
| | 2 | 4 | 5 | 1 | 2 | 8 | 9 | 0 | 1 | 2 | 3 | 7 | 8 | 9 | 0 | 1 | 2 | 3 |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | 38 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | 41 |
| Adenocarcinoma | | | | | | | | | | | | | | | X | | | 1 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | 1 |
| Hepatocellular Adenoma | | | | | | | X | | | | | | | | | | | 1 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Carcinoma | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
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Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:29
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Male
F3 500PPM TO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|----------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 2 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 8 | 8 | 8 | 8 | 0 | 0 | 4 | 4 | 5 | 5 | 5 | 5 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 1 |
| 2 | 4 | 5 | 1 | 2 | 8 | 9 | 0 | 1 | 2 | 3 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 0 | 0 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | 1 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Cardiovascular System | | | | | | | | | | | | | | | | | | | |
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | 1 |
| Endocrine System | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | 1 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | 2 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | 1 |
| Parathyroid Gland | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Pars Distalis, Adenoma | X | X | X | | X | | | X | X | X | | | | | | | | | 14 |
| Pars Distalis, Adenoma, Multiple | | | | | | | | | | | | | | | | | | | 1 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | 1 |
| C Cell, Carcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
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Lab: NCTR

CD Rat Male
F3 500PPM TO CTL

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 3 | 2 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | 8 | 8 | 8 | 0 | 0 | 4 | 4 | 5 | 5 | 5 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 1 |
| | 2 | 4 | 5 | 1 | 2 | 8 | 9 | 0 | 1 | 2 | 3 | 7 | 8 | 9 | 0 | 1 | 2 | 3 |

*TOTALS

General Body System

| | |
|-------------------------|---|
| Tissue NOS | 2 |
| Squamous Cell Carcinoma | 1 |

Genital System

| | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Coagulating Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | 1 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Carcinoma | | | | | X | | | X | | | | | | | | | | 3 |
| Prostate | | | | | | | | | | | | | | | | | | 4 |
| Prostate, Dorsal Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Adenocarcinoma | | | | | | | | | | | | | | X | | | | 1 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 |
| Prostate, Ventral Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Adenoma | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 |
| Rete Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
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P04: NEOPLASMS BY INDIVIDUAL ANIMAL
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First Dose M/F: NA / NA
Lab: NCTR

CD Rat Male
F3 500PPM TO CTL

| DAY ON TEST | CD Rat Male | | | | | | | | | | | | | | | | | | *TOTALS |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 2 | 3 |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | 1 |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 | |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node | | + | + | + | + | | | | | | | | | | | | | | 12 |
| Inguinal, Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | 1 |
| Lumbar, Squamous Cell Carcinoma, Metastatic, Preputial Gland | | | | | X | | | | | | | | | | | | | | 1 |
| Thoracic, Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | 1 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | 1 |
| Thymus | + | + | + | + | M | + | + | M | + | + | + | + | I | + | + | + | + | 44 | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | 1 |
| Integumentary System | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 | |
| Fibroadenoma | | | | | X | | | | | | | | | | | | | 2 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:30
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Male
F3 500PPM TO CTL

| DAY ON TEST | P04: NEOPLASMS BY INDIVIDUAL ANIMAL | | | | | | | | | | | | | | | | | |
|---------------------------------|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 3 | 2 | 3 |
| Fibroma | X X | | | | | | | | | | | | | | | | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 2 |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | 49 |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 |
| Neurofibrosarcoma | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | 1 |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | 1 |
| Chordoma | | | | | | | | | | | | | | | | | | 1 |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | 1 |
| Nervous System | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Reticulosis Malignant | | | | | | | | | | | | | | | | | | 1 |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Reticulosis Malignant | | | | | | | | | | | | | | | | | | 1 |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Reticulosis Malignant | | | | | | | | | | | | | | | | | | 1 |
| Respiratory System | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:30

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 500PPM TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 3 | 2 | 3 | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 | |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | 1 | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 | |
| Adventitia, Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | 1 | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 | |
| Special Senses System | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 39 | |
| Adventitia, Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | 1 | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 39 | |
| Adenoma | | | | | | | | | | | | | | | | | | 1 | |
| Adventitia, Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | 1 | |
| Lacrimal Gland | | | | | | | | | | | | | | | | | | 1 | |
| Urinary System | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Adventitia, Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | 1 | |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 | |
| Transit Epithe, Papilloma | | | | | | | | | | | | | | | | | | 1 | |
| Urethra | | | | | | | | | | | | | | | | | | 1 | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:30

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 500PPM TO CTL**

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 3 2 3 | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | | |
| 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 | | | | | | | | | | | | | | | | | | |
| 8 8 8 0 0 4 4 5 5 5 5 8 8 8 9 9 9 9 1 | | | | | | | | | | | | | | | | | | |
| 2 4 5 1 2 8 9 0 1 2 3 7 8 9 0 1 2 3 0 | | | | | | | | | | | | | | | | | | |

***TOTALS**

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | 1 |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | 1 |

*****END OF MALE DATA*****

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL**Test Compound:** Endocrine disruptor (Genistein)**CAS Number:** 446-72-0**Date Report Requested:** 10/17/2014**Time Report Requested:** 12:52:30**First Dose M/F:** NA / NA**Lab:** NCTR

| CD Rat Female
F3 0 PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 8 | 8 | 0 | 8 | 8 | 9 | 1 | 1 | 3 | 5 | 6 | 7 | 9 | 0 | 0 | 0 | 0 | 2 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 9 | 6 | 0 | 4 | 4 | 0 | 2 | 3 | 0 | 8 | 1 | 7 | 5 | 1 | 6 | 8 | 7 | 5 | 4 | 4 | 1 | 1 | 0 | 2 | 2 | 5 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| | | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 7 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 |
| | | 3 | 4 | 5 | 5 | 5 | 7 | 0 | 1 | 4 | 9 | 9 | 3 | 6 | 8 | 2 | 2 | 2 | 3 | 4 | 4 | 5 | 5 | 5 | 1 | 1 | 3 |
| | | 5 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 2 | 7 | 8 | 6 | 2 | 4 | 0 | 1 | 2 | 4 | 5 | 1 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Ileum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

Fibrous Histiocytoma, Metastatic, Skin

X

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Pancreas | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:31
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Female
F3 0 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 8 | 8 | 0 | 8 | 8 | 9 | 1 | 1 | 3 | 5 | 6 | 7 | 9 | 0 | 0 | 0 | 2 | 3 | 3 | 5 |
| | | 9 | 6 | 0 | 4 | 4 | 0 | 2 | 3 | 0 | 8 | 1 | 7 | 5 | 1 | 6 | 8 | 7 | 5 | 4 | 1 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 7 | 8 | 8 | 9 | 9 | 9 | 9 |
| | | 3 | 4 | 5 | 5 | 5 | 7 | 0 | 1 | 4 | 9 | 9 | 3 | 6 | 8 | 2 | 2 | 3 | 4 | 4 | 5 |
| | | 5 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 2 | 7 | 8 | 6 | 2 | 4 |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | X | | | | | | X |
| Islets, Pancreatic | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | X | | | | | |
| Parathyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pars Distalis, Adenoma | | | | | | | | | | | | | | X | X | X | X | X | X | X | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| General Body System | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | | + | + | + | M | M | + | + | + | + | + | + | + | + | + | + | M | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | + | + | + | + |
| Fibrous Histiocytoma, Metastatic, Skin | | | | | | | | | | | | | | X | | | | | | | |
| Ovary | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Tubulostromal Carcinoma | | | | | | | | | | | | | | | | | | + | + | + | + |
| Oviduct | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma | | | | | | | | | | | | | | | X | | | | | | |
| Polyp Stromal | | | | | | | X | X | | | | | | X | | | X | | | | X |
| Vagina | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

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I ..Insufficient tissue

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Endocrine disruptor (Genistein)
 CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:31
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Female
F3 0 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 8 | 8 | 0 | 8 | 8 | 9 | 1 | 1 | 3 | 5 | 6 | 7 | 9 | 0 | 0 | 0 | 0 | 2 | 3 | 3 | 5 | 5 | 5 | 5 | |
| | | 9 | 6 | 0 | 4 | 4 | 0 | 2 | 3 | 0 | 8 | 1 | 7 | 5 | 1 | 6 | 8 | 7 | 5 | 4 | 4 | 1 | 1 | 0 | 2 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | |
| | | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 7 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | |
| | | 3 | 4 | 5 | 5 | 5 | 7 | 0 | 1 | 4 | 9 | 9 | 3 | 6 | 8 | 2 | 2 | 2 | 3 | 4 | 4 | 5 | 5 | 5 | 1 | 3 |
| | | 5 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 2 | 7 | 8 | 6 | 2 | 4 | 4 | 0 | 1 | 2 | 4 |

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | | | | | | | | | | | | | | | | + | | | | | | | | | | | |
| Inguinal, Sarcoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lumbar, Fibrous Histiocytoma, Metastatic, Skin | | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| Popliteal, Sarcoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Thymus | + | + | + | + | + | + | + | + | + | + | M | M | + | + | + | + | M | + | + | + | + | + | + | + | + | | |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thymoma Malignant | X | | | | | | | | | | | | | | | | | | | | | | | | | | |

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma | | | | | | | | | | | | | | | | X | | | | | | | | | | | X |
| Adenocarcinoma, Multiple | | | | | | | | | | | | | | | X | X | | | | | | | | | | | |
| Fibroadenoma | | | | | | | | | | | | | | | | | | X | X | | | | | | | X | |
| Fibroadenoma, Multiple | | | X | X | X | | | X | X | | | | | | | | X | X | | | X | X | X | X | | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Fibrous Histiocytoma | | | | | | | | | | | | | | | | X | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:31
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Female
F3 0 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 8 | 8 | 0 | 8 | 8 | 9 | 1 | 1 | 3 | 5 | 6 | 7 | 9 | 0 | 0 | 0 | 0 | 2 | 3 | 3 | 5 | 5 | 5 | 5 | |
| | | 9 | 6 | 0 | 4 | 4 | 0 | 2 | 3 | 0 | 8 | 1 | 7 | 5 | 1 | 6 | 8 | 7 | 5 | 4 | 4 | 1 | 1 | 0 | 2 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 7 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | |
| | | 3 | 4 | 5 | 5 | 5 | 7 | 0 | 1 | 4 | 9 | 9 | 3 | 6 | 8 | 2 | 2 | 2 | 3 | 4 | 4 | 5 | 5 | 5 | 1 | 3 |
| | | 5 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 2 | 7 | 8 | 6 | 2 | 4 | 0 | 1 | 2 | 4 | 5 |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Bone, Joint | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Brain, Cerebellum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Granular Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Brain, Cerebrum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Glioma Malignant, Mixed | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Fibrous Histiocytoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:31

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female
F3 0 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 8 | 8 | 0 | 8 | 8 | 9 | 1 | 1 | 3 | 5 | 6 | 7 | 9 | 0 | 0 | 0 | 2 | 3 | 3 | 5 | |
| | | 9 | 6 | 0 | 4 | 4 | 0 | 2 | 3 | 0 | 8 | 1 | 7 | 5 | 1 | 6 | 8 | 7 | 5 | 4 | 1 | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 7 | 8 | 8 | 9 | 9 | 9 | 9 | |
| | | 3 | 4 | 5 | 5 | 5 | 7 | 0 | 1 | 4 | 9 | 9 | 3 | 6 | 8 | 2 | 2 | 2 | 3 | 4 | 5 | |
| | | 5 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 2 | 7 | 8 | 6 | 2 | 4 | |
| Harderian Gland | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Adenoma | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | | | | | | | | | | | | | | | | | | | | | | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

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P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:31

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female
F3 0 PPM | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 4 5 5 5 5 5 5 5 5 5 6 6 6 6 4 4 4 3 2 5 5 5 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 0 0 0 0 0 0 1 1 1 1 5 5 5 5 6 6 6 6 6 6 6 6 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 3 4 5 8 9 0 1 2 3 6 7 8 9 0 1 2 3 4 4 5 6 9 9 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 42 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 51 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |

Fibrous Histiocytoma, Metastatic, Skin

1

Oral Mucosa

1

Sarcoma

1

Pancreas

52

Salivary Glands

53

Stomach, Forestomach

53

Stomach, Glandular

52

Cardiovascular System

53

Blood Vessel

53

Heart

53

Endocrine System

Adrenal Cortex

53

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:31

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female
F3 0 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 4 | 4 | 4 | 3 | 2 | 5 | 5 | 4 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 8 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 9 | 9 | 9 | |
| | | 8 | 3 | 4 | 5 | 8 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 5 |
| | | *TOTALS | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | 2 |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | 1 |
| Parathyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Pars Distalis, Adenoma | | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 41 | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 49 | |
| Adenoma | | | | | | | | | | | | | | | | | | | X | | 2 | |
| Fibrous Histiocytoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | 1 |
| Ovary | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Tubulostromal Carcinoma | | | | | | | | | | | | | | | | | | | X | | 1 | |
| Oviduct | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | 1 | |
| Polyp Stromal | | | | | | | | | | | | | | | | | | | X | | 5 | |
| Vagina | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

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Lab: NCTR

| CD Rat Female
F3 0 PPM | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | 7 | | | | | | | | | | | | | | | | | | | | |
| | | 5 | | | | | | | | | | | | | | | | | | | | |
| | | 4 5 4 | | | | | | | | | | | | | | | | | | | | |
| | | 0 | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | | 1 | | | | | | | | | | | | | | | | | | | | |
| 8 8 | | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 3 | | 4 5 4 | | | | | | | | | | | | | | | | | | | | |
| 5 6 | | 6 | | | | | | | | | | | | | | | | | | | | |
| 6 7 | | 4 | | | | | | | | | | | | | | | | | | | | |
| 5 5 | | 5 | | | | | | | | | | | | | | | | | | | | |
| 5 4 | | 5 4 | | | | | | | | | | | | | | | | | | | | |
| *TOTALS | | | | | | | | | | | | | | | | | | | | | | |

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Lymph Node | + | | | | | | | | | | | | | | | | | | | | 18 |
| Inguinal, Sarcoma, Metastatic, Skin | | | | | | | | | | | | | | | X | | | | | | 1 |
| Lumbar, Fibrous Histiocytoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | 1 |
| Popliteal, Sarcoma, Metastatic, Skin | | | | | | | | | | | | | | | X | | | | | | 1 |
| Sarcoma, Metastatic, Skin | | | | | | | | | | | | | | | X | | | | | | 1 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | M | + | + | 48 |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | 1 |
| Thymoma Malignant | | | | | | | | | | | | | | | X | | | | | | 1 |

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Adenocarcinoma | | | | | | | | | | | | | | | X | | | | | | 5 |
| Adenocarcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | 2 |
| Fibroadenoma | X | | X | | | | | | | | | | | | X | | X | X | X | X | 9 |
| Fibroadenoma, Multiple | X | X | X | X | X | X | X | X | | | | | | | X | X | X | X | X | X | 23 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Fibrous Histiocytoma | I | | | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:32
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Female
F3 0 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|----|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 4 | 4 | 4 | 3 | 2 | 5 | 5 | 4 | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 8 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 9 | 9 | |
| | | 8 | 3 | 4 | 5 | 8 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 5 |
| | | | | | | | | | | | | | | | | | | | | *TOTALS | | |
| Sarcoma | | | | | | | | | | | | | | | | | | | | 1 | | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | 1 | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Bone, Joint | | | | | | | | | | | | | | | | | | | | | | 1 |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Granular Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | | | 1 |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Gloma Malignant, Mixed | | | | | | | | | | | | | | | | | | | | | | 1 |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Fibrous Histiocytoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | 1 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

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Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:32

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female
F3 0 PPM | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | 7 | | | | | | | | | | | | | | | | | | | | |
| | | 5 | | | | | | | | | | | | | | | | | | | | |
| | | 4 5 5 5 5 5 5 5 5 5 6 6 6 6 4 4 4 3 2 5 5 4 | | | | | | | | | | | | | | | | | | | | |
| | | 0 | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | | 1 | | | | | | | | | | | | | | | | | | | | |
| 0 1 | | 8 0 0 0 0 0 0 1 1 1 1 5 5 5 5 6 6 6 6 6 6 6 | | | | | | | | | | | | | | | | | | | | |
| 8 3 4 5 8 9 0 1 2 3 6 7 8 9 0 1 2 3 4 4 5 6 | | *TOTALS | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | | + | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | + | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Adenoma | | + | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | | + | | | | | | | | | | | | | | | | | | | | |
| SYSTEMIC LESIONS | | + | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Female
F3 5PPM TO CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 4 | 9 | 1 | 2 | 2 | 2 | 3 | 3 | 7 | 9 | 6 | 7 | 9 | 9 | 0 | 1 | 1 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 6 | 6 | 7 | 7 | 8 | 5 | 5 | 2 | 5 | 2 | 4 | 7 | 3 | 8 | 2 | 1 | 3 | 4 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum | + | | | | | | | | | | | | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Jejunum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leiomyosarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Cholangiocarcinoma | | | | | | | | | | | | | | | | | | | | | | X | | | | | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | + | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:32

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3 5PPM TO CTL

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 9 | 1 | 2 | 2 | 2 | 3 | 3 | 7 | 9 | 6 | 7 | 9 | 9 | 0 | 1 | 1 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 6 | 6 | 7 | 7 | 8 | 5 | 5 | 2 | 5 | 2 | 4 | 7 | 3 | 8 | 2 | 1 | 3 | 4 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 6 | 6 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | 1 | 4 | 7 | 8 | 8 | 9 | 9 | 9 | 4 | 7 | 9 | 3 | 2 | 2 | 1 | 2 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 1 | 1 |
| | 5 | 3 | 3 | 2 | 4 | 3 | 6 | 7 | 9 | 5 | 9 | 2 | 1 | 6 | 9 | 8 | 2 | 0 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | X | | | | X | | | | | | | | | | |
| Adrenal Medulla | M | M | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Parathyroid Gland | M | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | M | M | M | M | + | + | + | + | + | + | + | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| Pars Distalis, Carcinoma | | | | | | | | | | | | | | | | X | | | | | | | | | | | | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C Cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

General Body System

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | M | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | M |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

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| CD Rat Female
F3 5PPM TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | ANIMAL ID | 0 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 4 | 9 | 1 | 2 | 2 | 2 | 3 | 3 | 7 | 9 | 6 | 7 | 9 | 9 | 0 | 1 | 1 | 3 | 3 | 5 | 5 |
| | | 6 | 6 | 7 | 7 | 8 | 5 | 5 | 2 | 5 | 2 | 4 | 7 | 3 | 8 | 2 | 1 | 3 | 4 | 8 | 1 | 1 |
| | | 6 | 6 | 7 | 7 | 8 | 5 | 5 | 2 | 5 | 2 | 4 | 7 | 3 | 8 | 2 | 1 | 3 | 4 | 8 | 1 | 1 |
| Leiomyoma | | | | | | | | | | | | | | | | | | | | | | |
| Vagina | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | | | | | | | | | | | | | | | | | + | | | | | |
| Axillary, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |
| Lumbar, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leiomyosarcoma, Metastatic, Intestine
Small, Jejunum | | | | | | | | | | | | | | | | | | | | | | |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | M | M | + | + | + | M | + | + | + | + |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenocarcinoma | | | | | | | | | | | | | X | X | | | | | | | | |
| Adenocarcinoma, Multiple | | | | | | | | | | | | | | | X | | | | | | | |
| Fibroadenoma | | | | | | | | | | | | | X | | X | X | X | | | X | | |
| Fibroadenoma, Multiple | | | | | | | | | | | | | | | | | | | X | X | X | X |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Female
F3 5PPM TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 9 | 1 | 2 | 2 | 2 | 3 | 3 | 7 | 9 | 6 | 7 | 9 | 9 | 0 | 1 | 1 | 3 | 3 | 5 | 5 |
| | 6 | 6 | 7 | 7 | 8 | 5 | 5 | 2 | 5 | 4 | 7 | 3 | 8 | 2 | 1 | 3 | 4 | 8 | 1 | 1 | 1 |

Musculoskeletal System

Bone, Femur

+

Nervous System

Brain, Brain Stem

+

Brain, Cerebellum

+

Brain, Cerebrum

+

Respiratory System

Lung

+

Nose

+

Squamous Cell Carcinoma

X

Trachea

+

Special Senses System

Eye

+

Harderian Gland

M

Lacrimal Gland

+

Urinary System

Kidney

+

Urinary Bladder

M

M

SYSTEMIC LESIONS

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

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**CD Rat Female
F3 5PPM TO CTL**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 9 | 1 | 2 | 2 | 2 | 3 | 3 | 7 | 9 | 6 | 7 | 9 | 9 | 0 | 1 | 1 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 6 | 6 | 7 | 7 | 8 | 5 | 5 | 2 | 5 | 2 | 4 | 7 | 3 | 8 | 2 | 1 | 3 | 4 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 6 | 6 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | 1 | 4 | 7 | 8 | 8 | 9 | 9 | 9 | 4 | 7 | 9 | 3 | 2 | 2 | 1 | 2 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 1 |
| | 5 | 3 | 3 | 2 | 4 | 3 | 6 | 7 | 9 | 5 | 9 | 2 | 1 | 6 | 9 | 8 | 2 | 0 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | 3 | 3 | 2 | 4 | 3 | 6 | 7 | 9 | 5 | 9 | 2 | 1 | 6 | 9 | 8 | 2 | 0 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 |

Multiple Organ

 + +

Leukemia Mononuclear

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:33

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3 5PPM TO CTL

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 | | | | | | | | | | | | | | | | | |
| 4 5 | | | | | | | | | | | | | | | | | | |
| 2 5 5 5 5 5 5 5 5 6 5 5 5 4 4 5 4 4 5 4 | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | |
| 3 3 3 3 3 3 6 6 6 8 9 9 9 9 9 9 1 1 1 1 | | | | | | | | | | | | | | | | | | |
| 0 4 5 6 7 2 3 4 9 0 1 2 3 4 4 5 6 5 6 6 | | | | | | | | | | | | | | | | | | |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Leiomyosarcoma | | | | | | | | | | | | | | | | X | | | 1 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cholangiocarcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | X | | | | | | | | | | | | | 1 |
| Mesentery | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach | | | | | | | | | | | | | | | | | | | 1 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | 49 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
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Route: DOSED FEED
Species/Strain: Rat/CD

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Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:33
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Female
F3 5PPM TO CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---------------------------------|-------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 5 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| | | 3 | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 1 | 1 | 1 | 6 |
| | | 0 | 4 | 5 | 6 | 7 | 2 | 3 | 4 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 6 |
| | | *TOTALS | | | | | | | | | | | | | | | | | |

Endocrine System

| | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | 2 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | 1 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | 2 |
| Parathyroid Gland | + | + | + | + | M | + | M | + | + | + | + | + | + | + | + | + | + | + | 41 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 42 |
| Pars Distalis, Carcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | 1 |
| C Cell, Carcinoma | | | | | | | | | | | | | | | | | | | 1 |

General Body System

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

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Lab: NCTR

CD Rat Female
F3 5PPM TO CTL

| | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS | |
|---|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|----|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | |
| | 3 | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 1 | 1 | 1 | 6 | 6 | |
| | 0 | 4 | 5 | 6 | 7 | 2 | 3 | 4 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 5 | 6 | 6 | |
| Leiomyoma | | | | | | | | | | | | | | | | | | X | | 1 | |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 49 | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | X | | 1 |
| Lymph Node | | + | | + | | | + | | | | | | | | | | | | + | | 9 |
| Axillary, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | 1 |
| Lumbar, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 49 | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 | |
| Leiomyosarcoma, Metastatic, Intestine
Small, Jejunum | | | | | | | | | | | | | | | | | | | X | | 1 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | X | | 1 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | | 45 |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 49 | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | X | | 6 |
| Adenocarcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | 2 |
| Fibroadenoma | | | | | | | | | | | | | | | | | | | X | | 9 |
| Fibroadenoma, Multiple | | | | | | | | | | | | | | | | | | | X | | 11 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

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BLANK ..Not examined microscopically

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CD Rat Female
F3 5PPM TO CTL

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 3 | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 1 | 1 | 1 | 6 | 6 |
| | 0 | 4 | 5 | 6 | 7 | 2 | 3 | 4 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 5 | 6 |

*TOTALS

Musculoskeletal System

Bone, Femur + 50

Nervous System

Brain, Brain Stem + 50

Brain, Cerebellum + 50

Brain, Cerebrum + 50

Respiratory System

Lung + 50

Nose + 50

Squamous Cell Carcinoma + 1

Trachea + 50

Special Senses System

Eye + 41

Harderian Gland + 40

Lacrimal Gland + 1

Urinary System

Kidney + 50

Urinary Bladder + 47

SYSTEMIC LESIONS

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

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|-------------|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 5 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| | 3 | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 1 | 1 | 1 | 6 |
| | 0 | 4 | 5 | 6 | 7 | 2 | 3 | 4 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 6 |

*TOTALS

| | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | X | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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**CD Rat Female
F3 100PPM TO CTL**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 7 | 5 | 8 | 0 | 0 | 1 | 1 | 3 | 4 | 4 | 6 | 7 | 7 | 8 | 8 | 8 | 1 | 2 | 2 | 3 | 4 | 5 | 5 | 5 | 5 | 5 |
| | 5 | 9 | 8 | 5 | 5 | 6 | 8 | 5 | 1 | 8 | 5 | 4 | 8 | 3 | 6 | 8 | 2 | 0 | 8 | 6 | 4 | 1 | 0 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| | 0 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 |
| | 9 | 2 | 6 | 9 | 9 | 1 | 1 | 5 | 5 | 7 | 1 | 2 | 2 | 4 | 5 | 5 | 3 | 3 | 3 | 4 | 4 | 6 | 6 | 1 | 1 | 2 |
| | 5 | 2 | 6 | 2 | 3 | 3 | 4 | 5 | 8 | 3 | 2 | 3 | 6 | 2 | 4 | 6 | 1 | 5 | 7 | 5 | 9 | 3 | 4 | 8 | 9 | 0 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Ileum | + | + | + | + | + | A | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Jejunum | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | | |

Cardiovascular System

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:34

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Female
F3 100PPM TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | |
|----------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 7 | 5 | 8 | 0 | 0 | 1 | 1 | 3 | 4 | 4 | 6 | 7 | 7 | 8 | 8 | 8 | 1 | 2 | 2 | 3 | 4 |
| | 5 | 9 | 8 | 5 | 5 | 6 | 8 | 5 | 1 | 8 | 5 | 4 | 8 | 3 | 6 | 8 | 2 | 0 | 8 | 6 | 4 |
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Schwannoma Nos | | | | | | | | | | | | | | | | | | | | | X |
| Endocrine System | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | | X |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | |
| General Body System | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:34
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Female
F3 100PPM TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | ANIMAL ID | 3 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 7 | 5 | 8 | 0 | 0 | 1 | 1 | 3 | 4 | 4 | 6 | 7 | 7 | 8 | 8 | 1 | 2 | 2 | 3 | 4 | 5 |
| | | 5 | 9 | 8 | 5 | 5 | 6 | 8 | 5 | 1 | 8 | 5 | 4 | 8 | 3 | 6 | 8 | 2 | 0 | 8 | 6 | 4 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |
| Ovary | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |
| Oviduct | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |
| Uterus | | | | | | | | | | | | | | | | | | | | | | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |
| Polyp Stromal | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma Stromal | | | | | | | | | | | | | | | | | | | | | | |
| Vagina | | | | | | | | | | | | | | | | | | | | | | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | |
| Inguinal, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |
| Mediastinal, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

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Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:35
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Female
F3 100PPM TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | ANIMAL ID | 3 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 7 | 5 | 8 | 0 | 0 | 1 | 1 | 3 | 4 | 4 | 6 | 7 | 7 | 8 | 8 | 8 | 1 | 2 | 2 | 3 | |
| | | 5 | 9 | 8 | 5 | 5 | 6 | 8 | 5 | 1 | 8 | 5 | 4 | 8 | 3 | 6 | 8 | 2 | 0 | 8 | 6 | |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | X | | | | | | | | | | | | | | | | | | | | |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | X | | | | | | | | | | | | | | | | | | | | |
| Thymus | | M | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | M | + | + | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenocarcinoma | | X | X | | | | | | | | | | | | | | | | | | | X |
| Adenocarcinoma, Multiple | | X | | | | | | | | | | | | | | | | | | | | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | X |
| Fibroadenoma | | | | | | | | | X | X | | | | | X | X | X | | | | | X |
| Fibroadenoma, Multiple | | X | | | | | | | X | X | X | | | | X | | | X | X | X | | X |
| Leukemia Mononuclear | | X | | | | | | | | | | | | | | | | | | | | |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | X | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebellum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:35
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Female
F3 100PPM TO CTL | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|-----------------------|---|---|---|---|---|---|---|---|---|--|
| | | 3 5 5 6 | | | | | | | | | | | | | | | | | | | | | |
| | ANIMAL ID | 7 5 8 0 0 1 1 3 4 4 6 7 7 8 8 8 1 2 2 3 4 5 5 5 5 | | | | | | | | | | | 5 5 5 5 5 5 5 5 5 5 5 | | | | | | | | | | |
| | | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| | | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| | | 0 2 2 2 2 2 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 | 9 2 6 9 9 1 1 5 5 7 1 2 2 4 5 5 3 3 3 3 4 4 4 4 | | | | | | | | | | | | | | | | | | | | |
| | | 5 2 6 2 3 3 4 5 8 3 2 3 6 2 4 6 1 5 7 5 9 3 4 6 6 1 | 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 | | | | | | | | | | | | | | | | | | | | |
| | | 2 2 2 2 2 2 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 | 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 | | | | | | | | | | | | | | | | | | | | |
| | | 5 2 6 2 3 3 4 5 8 3 2 3 6 2 4 6 1 5 7 5 9 3 4 6 6 1 | 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 | | | | | | | | | | | | | | | | | | | | |
| | | 2 2 2 2 2 2 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 | 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 | | | | | | | | | | | | | | | | | | | | |
| | | 5 2 6 2 3 3 4 5 8 3 2 3 6 2 4 6 1 5 7 5 9 3 4 6 6 1 | 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 | | | | | | | | | | | | | | | | | | | | |
| | | 2 2 2 2 2 2 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 | 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 | | | | | | | | | | | | | | | | | | | | |
| | | 5 2 6 2 3 3 4 5 8 3 2 3 6 2 4 6 1 5 7 5 9 3 4 6 6 1 | 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Adenoma | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:35
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Female
F3 100PPM TO CTL

| DAY ON TEST | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 4 | 6 | 6 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 3 | 3 | 4 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 6 | 6 |
| | 8 | 9 | 0 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 8 | 9 | 5 | 7 | 8 |
| | | | | | | | | | | | | | | | | | | 7 |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | 1 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | X | | | | | | | | | | | | | | | | 1 |
| Mesentery | | | | | | | | | | | | | | | | | | 1 |
| Oral Mucosa | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | 1 |

Cardiovascular System

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
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P04: NEOPLASMS BY INDIVIDUAL ANIMAL
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Date Report Requested: 10/17/2014
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First Dose M/F: NA / NA
Lab: NCTR

CD Rat Female
F3 100PPM TO CTL

| | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|----------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 6 | |
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Schwannoma Nos | | | | | | | | | | | | | | | | | | | | 1 |
| Endocrine System | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | | 2 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 47 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 42 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| General Body System | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma | | | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:35

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3 100PPM TO CTL

| | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|-----------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 6 | 6 | 6 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 3 | 3 | 4 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 6 | 6 | 9 |
| | 8 | 9 | 0 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 8 | 9 | 5 | 7 | 8 | 7 | 7 |
| Carcinoma | | X | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | 1 |
| Adenoma | | | | | | | | | | | | | | | X | | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| Polyp Stromal | | | | | | | | | | | | | | X | X | X | | | | 5 |
| Sarcoma Stromal | | | | | | | | | | | | | | | X | | | | | 2 |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node | | | | | | | + | | | | | | | | | | | | | 8 |
| Inguinal, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| Mediastinal, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:36
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Female
F3 100PPM TO CTL

| | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|-------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 46 |
| Integumentary System | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | | X | | | | | | | | X | X | X | | | | | | | X | 8 |
| Adenocarcinoma, Multiple | | | | | | | | | | | | | | | | | | | | 2 |
| Adenoma | | | | | | | | | | | | | | | | | | | | 1 |
| Fibroadenoma | | X | X | X | | | | | | X | X | X | X | X | X | X | X | X | X | 13 |
| Fibroadenoma, Multiple | | | | X | | | | | | X | X | X | X | X | X | X | X | X | X | 20 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | 1 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | | | 1 |
| Bone, Femur | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Nervous System | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Brain, Cerebellum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

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CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:36
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Female
F3 100PPM TO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 6 | 6 | 6 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 3 | 4 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 6 | 6 | 9 |
| 8 | 9 | 0 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 8 | 9 | 5 | 7 | 8 | 7 | 7 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | 1 |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Respiratory System | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | 1 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | 1 |
| Special Senses System | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 |
| Urinary System | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | 1 |
| Renal Tubule, Adenoma | | | | | | | | | | | | | | | | | | | 1 |
| X | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | 1 |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
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Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:36
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Female
F3 500PPM TO CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 2 | 9 | 9 | 2 | 2 | 4 | 5 | 8 | 9 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 9 | 0 | 0 | 3 | 3 | 5 | 5 | 5 | 5 | |
| | | 4 | 4 | 5 | 5 | 7 | 7 | 9 | 9 | 1 | 1 | 0 | 0 | 5 | 8 | 7 | 9 | 6 | 9 | 6 | 7 | 7 | 6 | 2 | 6 | 1 | 1 | 1 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| | | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | | 6 | 4 | 4 | 8 | 8 | 0 | 2 | 6 | 7 | 4 | 7 | 7 | 1 | 1 | 1 | 2 | 5 | 5 | 2 | 6 | 2 | 3 | 4 | 6 | 6 | 6 | 6 | 2 |
| | | 7 | 1 | 2 | 1 | 3 | 5 | 3 | 0 | 6 | 0 | 1 | 5 | 1 | 4 | 5 | 6 | 8 | 2 | 5 | 5 | 1 | 7 | 9 | 1 | 5 | 6 | 7 | 8 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Female
F3 500PPM TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | |
|-----------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
| | 2 | 9 | 9 | 2 | 2 | 4 | 5 | 8 | 9 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 9 | 0 |
| | 4 | 4 | 5 | 5 | 7 | 7 | 9 | 9 | 1 | 1 | 0 | 0 | 5 | 8 | 7 | 9 | 6 | 7 | 7 | 6 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | + |
| Pheochromocytoma Benign | | | | | | | | | | | X | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | + | M | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | + |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | + |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | X | X | + | + | + | + | X | + | + | + | + |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | + |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | X | X | |
| General Body System | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | M | + | + | + |
| Ovary | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | + |
| Yolk Sac Carcinoma | | | | | | | | | | | | | | | | | | X | | |
| Oviduct | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | + |
| Uterus | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | + |
| Polyp Stromal | | | | | | | | | | | | | | | | | | X | | |
| Vagina | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | + |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | + |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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Lab: NCTR

| CD Rat Female
F3 500PPM TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | | 2 | 9 | 9 | 2 | 2 | 4 | 5 | 8 | 9 | 3 | 4 | 5 | 6 | 6 | 6 | 6 | 7 | 8 | 8 | 9 | 0 | 0 | 3 | 5 | | |
| | | 4 | 4 | 5 | 5 | 7 | 7 | 9 | 9 | 1 | 1 | 0 | 0 | 5 | 8 | 7 | 9 | 6 | 9 | 6 | 7 | 7 | 6 | 2 | 1 | | |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 8 | 9 | 9 | 9 | | |
| | | 6 | 4 | 4 | 8 | 8 | 0 | 2 | 6 | 7 | 4 | 7 | 7 | 1 | 1 | 1 | 1 | 2 | 5 | 5 | 2 | 6 | 2 | 3 | 4 | | |
| | | 7 | 1 | 2 | 1 | 3 | 5 | 3 | 0 | 6 | 0 | 1 | 5 | 1 | 4 | 5 | 6 | 8 | 2 | 5 | 5 | 1 | 7 | 9 | 1 | | |
| Lymph Node | | | | | | | | | | | | | | | | | | + | + | + | + | + | + | + | + | | |
| Lumbar, Yolk Sac Carcinoma, Metastatic, | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Ovary | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Renal, Yolk Sac Carcinoma, Metastatic, | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Ovary | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | | |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | | |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | | |
| Thymus | | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | M | M | + | + | + | + | + | + | | |
| Thymoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Adenocarcinoma | | X | | | | | X | | | X | X | | | | | | | | | X | | X | | | | X | |
| Adenocarcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Fibroadenoma | | | | | | | | | | | X | X | | | X | X | X | X | X | X | X | X | X | X | X | | |
| Fibroadenoma, Multiple | | | | | | | | | | | | X | | | | | | | | | X | | X | | X | X | |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | X | | | | | | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:37
First Dose M/F: NA / NA
Lab: NCTR

| CD Rat Female
F3 500PPM TO CTL | DAY ON TEST | P04: NEOPLASMS BY INDIVIDUAL ANIMAL | | | | | | | | | | | | | | | | | | | | |
|---|-------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | Test Compound: Endocrine disruptor (Genistein) | | | | | | | | | | | | | | | | | | | | |
| | | CAS Number: 446-72-0 | | | | | | | | | | | | | | | | | | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | |
| | | 2 | 9 | 9 | 2 | 2 | 4 | 5 | 8 | 9 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 9 | 0 | |
| | | 4 | 4 | 5 | 5 | 7 | 7 | 9 | 9 | 1 | 1 | 0 | 0 | 5 | 8 | 7 | 9 | 6 | 7 | 7 | 6 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 6 | 8 | 9 | |
| | | 6 | 4 | 4 | 8 | 8 | 0 | 2 | 6 | 7 | 4 | 7 | 7 | 1 | 1 | 1 | 2 | 5 | 5 | 2 | 6 | |
| | | 7 | 1 | 2 | 1 | 3 | 5 | 3 | 0 | 6 | 0 | 1 | 5 | 1 | 4 | 5 | 6 | 8 | 2 | 5 | 1 | |
| | | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 7 | 9 | 1 | 5 | 6 | |
| Bone, Femur | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Nervous System | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Brain, Brain Stem | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Brain, Cerebellum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Brain, Cerebrum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma, Metastatic, Pituitary Gland | | X | | | | | | | | | | | | | | | | | | | | |
| Granular Cell Tumor Benign | | | | | | | | | | | | | | | | | X | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Squamous Cell Carcinoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | X | | | | |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | X | | | | |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | | + | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:37

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Female
F3 500PPM TO CTL**

Multiple Organ

| DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 2 | 9 | 9 | 2 | 2 | 4 | 5 | 8 | 9 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 9 | 0 | 0 | 3 | 3 | 5 | 5 | 5 |
| | 4 | 4 | 5 | 5 | 7 | 7 | 9 | 9 | 1 | 1 | 0 | 0 | 5 | 8 | 7 | 9 | 6 | 9 | 6 | 7 | 7 | 6 | 2 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 8 | 9 | 9 | 9 | 0 |
| | 6 | 4 | 4 | 8 | 8 | 0 | 2 | 6 | 7 | 4 | 7 | 7 | 1 | 1 | 1 | 2 | 5 | 5 | 2 | 6 | 2 | 3 | 4 | 6 | 6 | 2 |
| | 7 | 1 | 2 | 1 | 3 | 5 | 3 | 0 | 6 | 0 | 1 | 5 | 1 | 4 | 5 | 6 | 8 | 2 | 5 | 5 | 1 | 7 | 9 | 1 | 5 | 6 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

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Experiment Number: 99930-93
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Date Report Requested: 10/17/2014
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First Dose M/F: NA / NA
Lab: NCTR

CD Rat Female
F3 500PPM TO CTL

| DAY ON TEST | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 1 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 4 | 4 | 4 | 6 | 9 | 9 | 9 | 0 | 2 | 2 | 6 | 7 | 7 | 7 | 7 | 9 |
| | 8 | 9 | 1 | 2 | 3 | 5 | 5 | 6 | 7 | 7 | 4 | 5 | 9 | 0 | 1 | 2 | 3 | 4 |
| | | | | | | | | | | | | | | | | | | |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 37 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Ileum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Jejunum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Oral Mucosa | | | | | | | | | | | | | | | | | | 1 |
| Sarcoma | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

Endocrine System

| | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma | | | | | | | | | | | | | | | X | | 1 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:37

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3 500PPM TO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 1 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 2 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 4 | 4 | 4 | 4 | 6 | 9 | 9 | 9 | 0 | 2 | 2 | 6 | 7 | 7 | 7 | 7 | 7 | 9 |
| 8 | 9 | 1 | 2 | 3 | 5 | 5 | 6 | 7 | 7 | 4 | 5 | 9 | 0 | 1 | 2 | 3 | 4 | 8 | |

| | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | X | 2 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma | | | | | | | | | | | | | | | | | | X | 1 |
| Parathyroid Gland | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 40 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | X | 3 |

General Body System

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Yolk Sac Carcinoma | | | | | | | | | | | | | | | | | | X | 1 |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Polyp Stromal | | | | | | | | | | | | | | | | | | X | 2 |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

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I ..Insufficient tissue

Experiment Number: 99930-93
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First Dose M/F: NA / NA
Lab: NCTR

CD Rat Female
F3 500PPM TO CTL

| DAY ON TEST | CD Rat Female | | | | | | | | | | | | | | | | | |
|--|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 1 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 2 |
| Lymph Node | | | | | | | | | | | | | | | | | | 12 |
| Lumbar, Yolk Sac Carcinoma, Metastatic, | | | | | | | | | | | | | | | | | | 1 |
| Ovary | | | | | | | | | | | | | | | | | | |
| Renal, Yolk Sac Carcinoma, Metastatic, | | | | | | | | | | | | | | | | | | 1 |
| Ovary | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Thymoma Malignant | | | | | | | | | | | | | | | | | | 1 |
| Integumentary System | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | | | | | | | | | | X | | | | | X | | X | 10 |
| Adenocarcinoma, Multiple | | | | | | | | | | | X | | | | X | | | 2 |
| Adenoma | | | | | | | | | | | | | | | | | | 1 |
| Fibroadenoma | | | X | | X | | | | | | | | | | X | | X | 19 |
| Fibroadenoma, Multiple | X | | | X | X | | X | | X | | | | | | X | | | 9 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | 1 |
| Sarcoma | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | 1 |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | |
| * ..Total animals with tissue examined microscopically; Total animals with tumor | | | | | | | | | | | | | | | | | | |
| + ..Tissue examined microscopically | | | | | | | | | | | | | | | | | | |
| X ..Lesion present | | | | | | | | | | | | | | | | | | |
| I ..Insufficient tissue | | | | | | | | | | | | | | | | | | |
| M ..Missing tissue | | | | | | | | | | | | | | | | | | |
| A ..Autolysis precludes evaluation | | | | | | | | | | | | | | | | | | |
| BLANK ..Not examined microscopically | | | | | | | | | | | | | | | | | | |
| *TOTALS | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

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Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Endocrine disruptor (Genistein)
CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:37
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Female
F3 500PPM TO CTL

| | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|---|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 1 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 2 | 3 |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Nervous System | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Carcinoma, Metastatic, Pituitary Gland | | | | | | | | | | | | | | | | | | | | 1 |
| Granular Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | 1 |
| Respiratory System | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Squamous Cell Carcinoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | X | X | | 3 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Special Senses System | | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 |
| Urinary System | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 47 |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

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**CD Rat Female
F3 500PPM TO CTL**

| DAY ON TEST | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 1 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 2 | 3 |
| Multiple Organ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 4 | 4 | 4 | 6 | 9 | 9 | 9 | 0 | 2 | 2 | 6 | 7 | 7 | 7 | 7 | 7 | 9 |
| | 8 | 9 | 1 | 2 | 3 | 5 | 5 | 6 | 7 | 7 | 4 | 5 | 9 | 0 | 1 | 2 | 3 | 4 | 8 |

*TOTALS

50

** END OF REPORT **

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

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